Strategic Logistics Transformation

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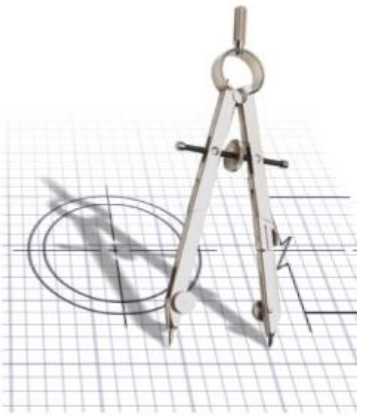
AFCEA C4ISR Symposium
27 April 2005 - San Diego, CA

Charting the Cours



- **Strategic Context & Vision**

  - Developing Joint Capabilities

- **Focused Logistics**

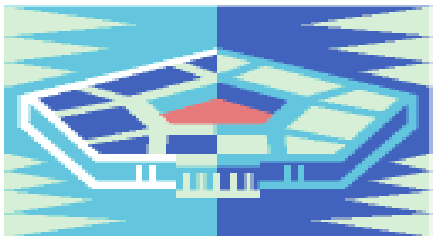
  -Initiatives

Our History

- Unparalleled industrial capabilities
- Highly trained and motivated workforce
- First fully automated logistics system
- Envied by our allies; Feared by our adversaries

World class in mass logistics.

Post Cold War



- $109B in inventory (1989)
- 60-day response time
- 42 Maintenance Depots
- 788M cubic feet of storage space

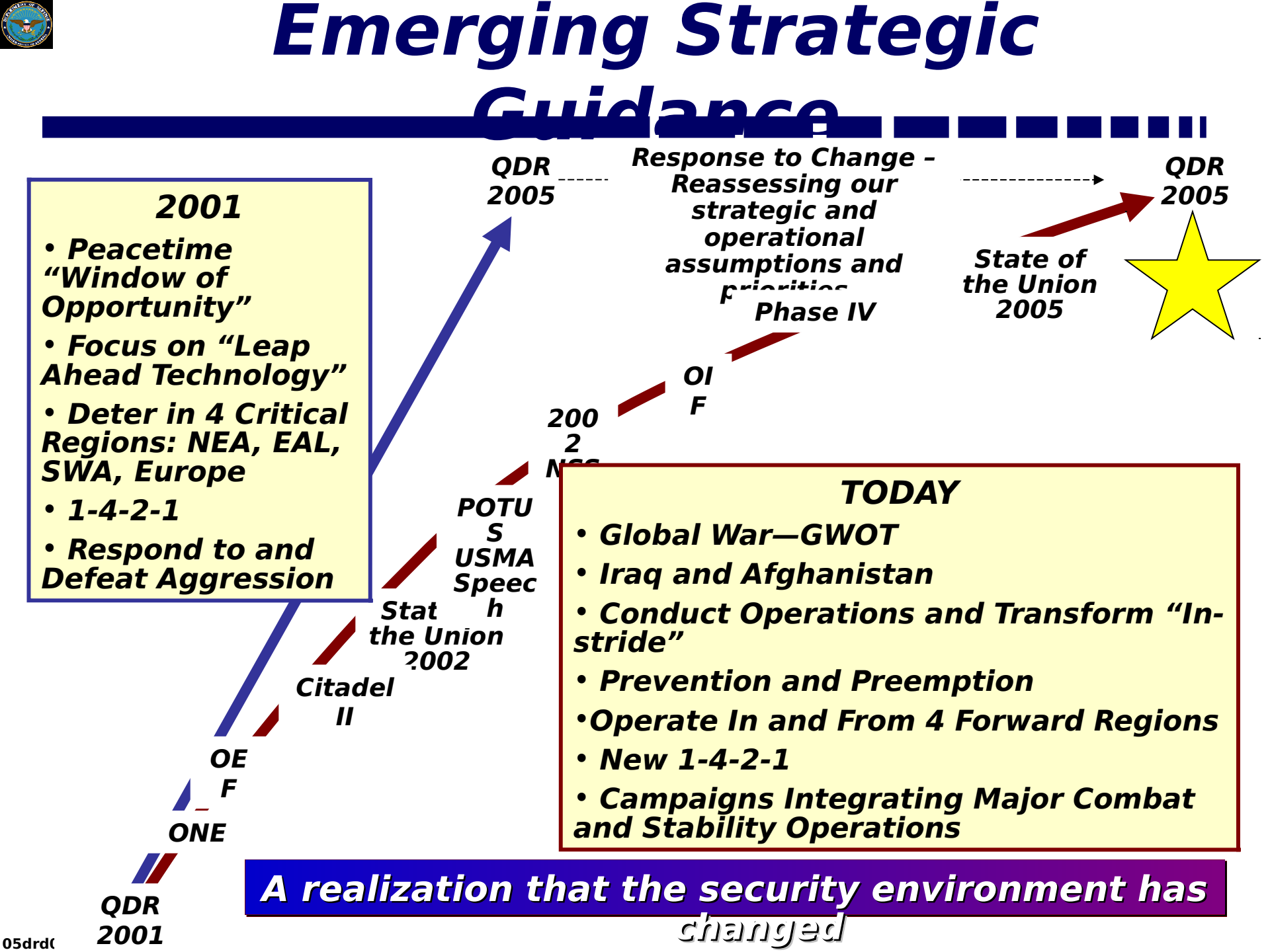
- $67B in inventory
- 32-day response time
- 20 Maintenance Depots
- 323M cubic feet of storage space

Ready to Project and Sustain a Smaller "Cold

The Changing Game

- **Immediately Employable Force Option**
- **Preemptive Capability**
- **Net-Centric Warfare**
- **Focused Joint Logistics**

Emerging Strategic Guidance

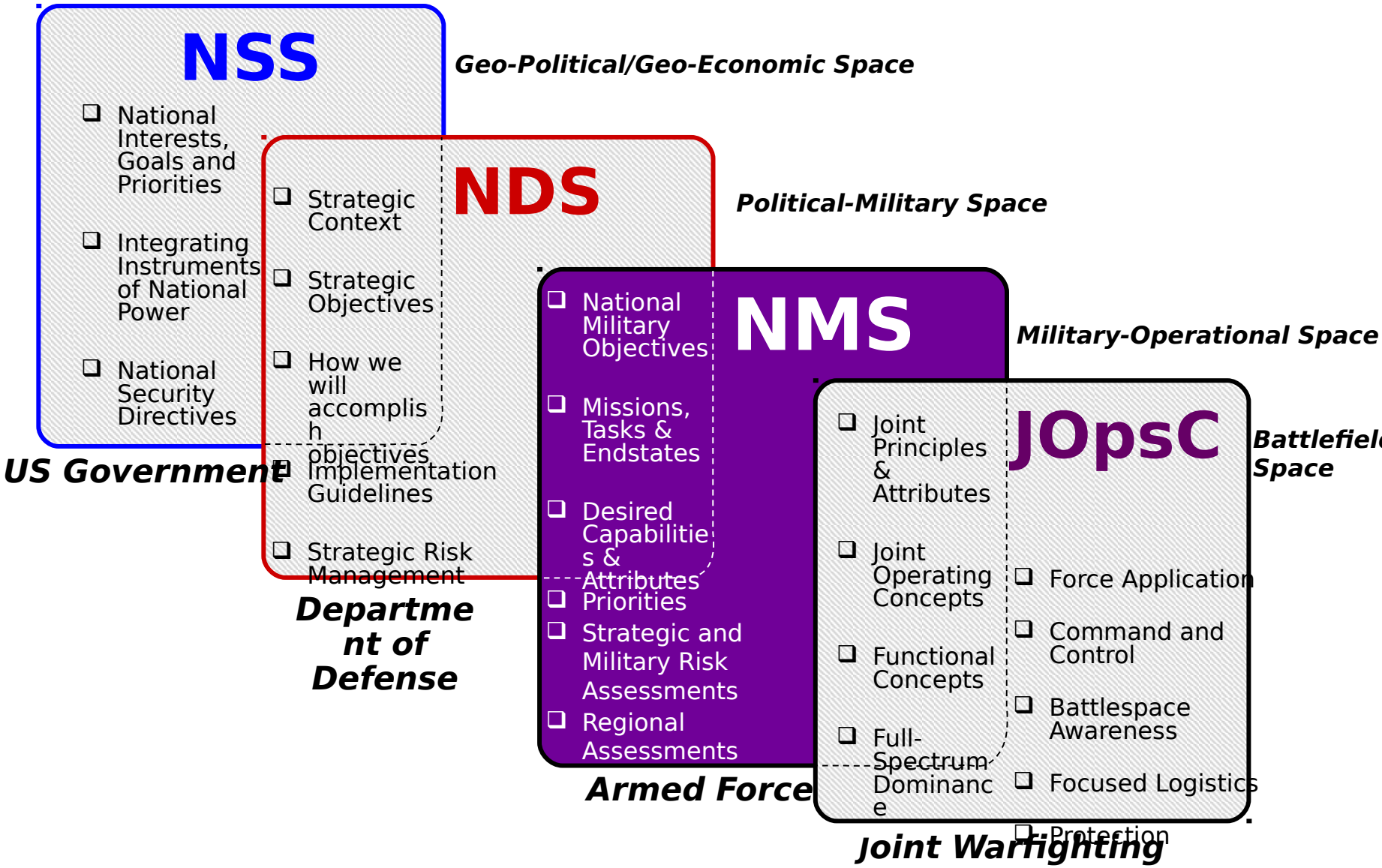

2001
• Peacetime "Window of Opportunity"
• Focus on "Leap Ahead Technology"
• Deter in 4 Critical Regions: NEA, EAL, SWA, Europe
• 1-4-2-1
• Respond to and Defeat Aggression
QDR 2001
ONE
OE F
Citadel l
Stat the Union 2002
POTU S USMA Speec h
200 2
OI F
Phase IV
QDR 2005
Response to Change – Reassessing our strategic and operational assumptions and
QDR 2005
State of the Union 2005
TODAY
• Global War—GWOT
• Iraq and Afghanistan
• Conduct Operations and Transform "In-stride"
• Prevention and Preemption
•Operate In and From 4 Forward Regions
• New 1-4-2-1
• Campaigns Integrating Major Combat and Stability Operations

A realization that the security environment has changed

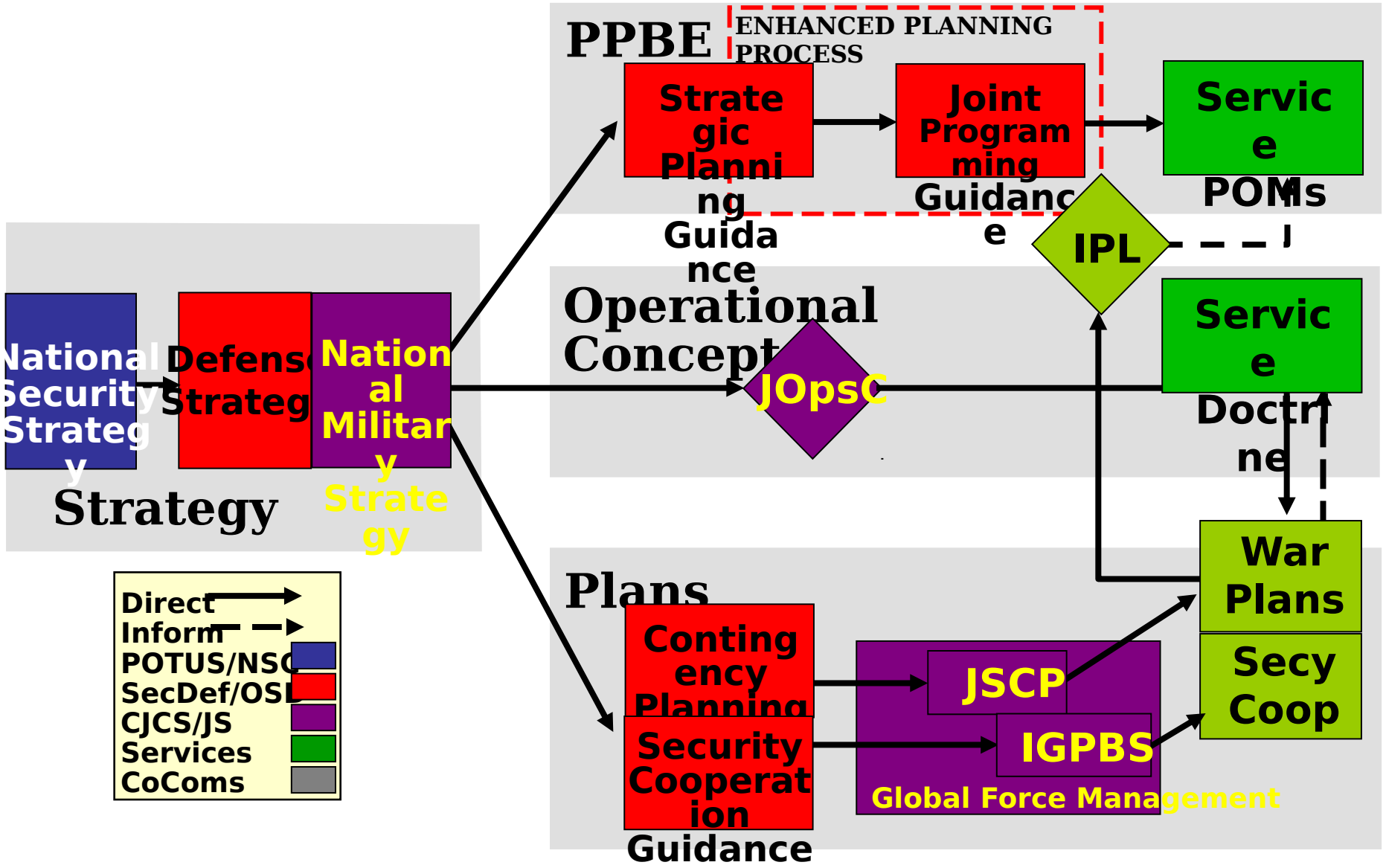
Joint Logistics Capability Development

Logistics Governance Processes & Products

Linking National Strategy to Operational Level



Strategy: Foundation for all Major Processes



A Joint Force for Mission Success

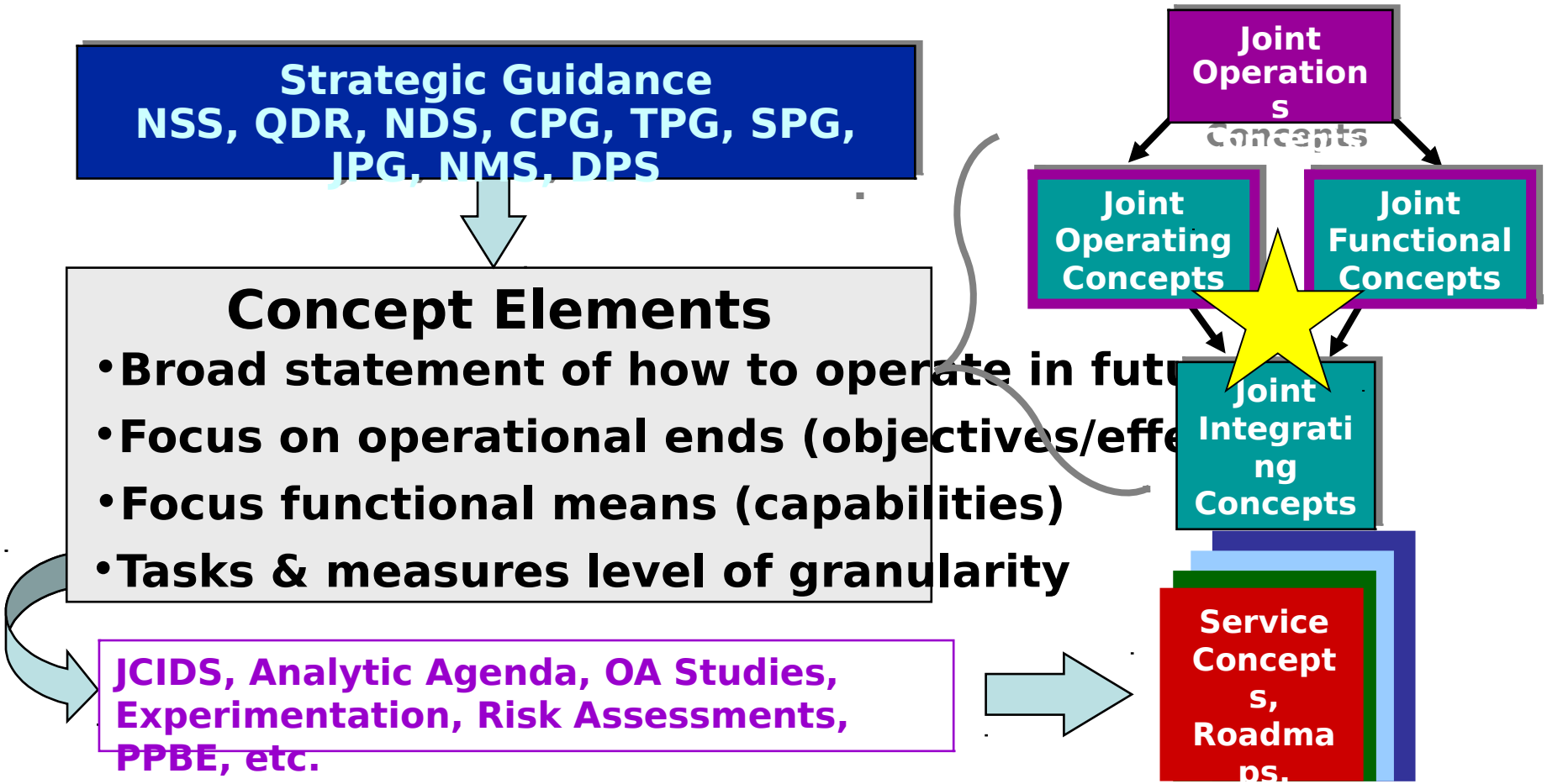
- Joint Operations Concepts (JOpsC) lists desired attributes – characteristics of the Joint Force:
  - Fully Integrated
  - Expeditionary
  - Networked
  - Decentralized
  - Adaptable
  - Decision Superiority
  - Lethal

- Functions and capabilities – actions the Joint Force must perform and associated solutions for doctrine, organization, training & education, material, leadership, personnel and facilities (DOTMLPF):
  - Applying Force
  - Deploying and Sustaining Military Capabilities
  - Securing Battlespace
  - Achieving Decision Superiority

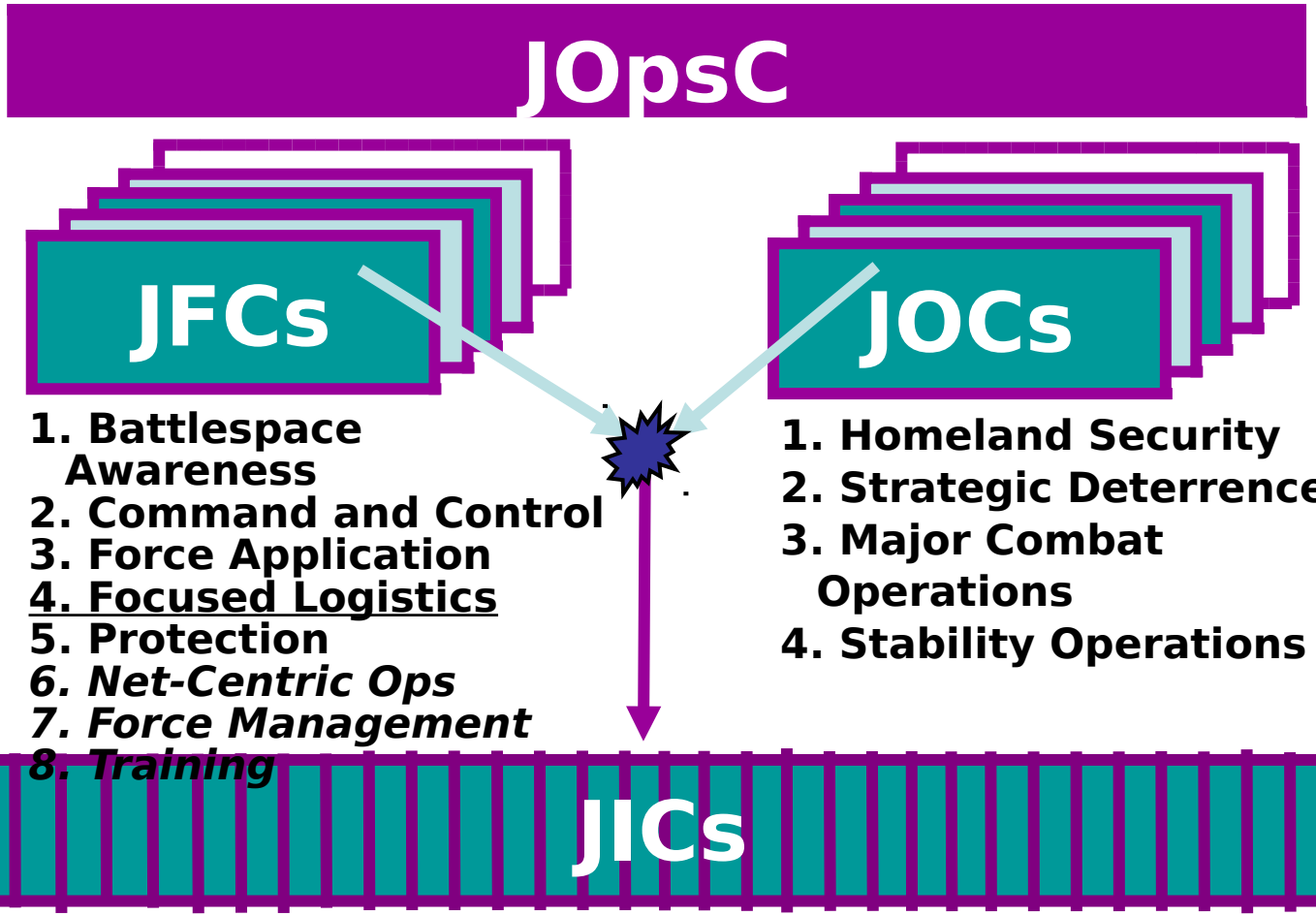
Commanders derive tasks and define required capabilities through an analysis of functions and functional concepts

Family of Joint Concepts

The Capabilities Based Approach depends upon joint concepts which must translate strategic guidance into “born joint” capabilities. Current focus is to develop 2010-20 capability needs with sufficient resolution to support rigorous analysis and inform both future joint force employment and future joint force development.


Strategic Guidance
NSS, QDR, NDS, CPG, TPG, SPG, JPG, NMS, DPS
Concept Elements
•Broad statement of how to operate in futu
•Focus on operational ends (objectives/effe
•Focus functional means (capabilities)
•Tasks & measures level of granularity
JCIDS, Analytic Agenda, OA Studies, Experimentation, Risk Assessments, PPBE, etc.
Joint Operations Concepts
Joint Operating Concepts
Joint Functional Concepts
Joint Integrating Concepts
Service Concepts, Roadmaps,

Current Joint Concepts



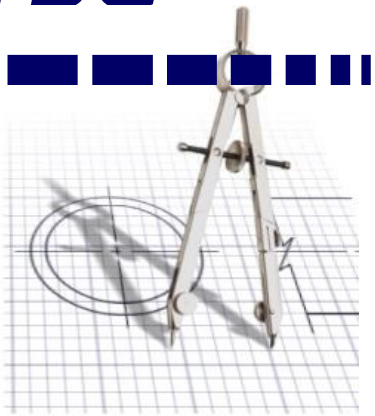
1. Undersea Superiority
2. *Forcible Entry Ops*
3. *Global Strike Ops (USAF, FA FCB)*
4. *Sea-Basing Ops (Navy/Marines, FM FCB)*
5. *Air & Missile Defense (USAF, FP FCB)*
6. *JC2 (JFCOM, C2 FCB)*
7. *Joint Logistics (Army-TRANSCOM, FL FCB)*

Current "Logistics" Direction

- US military driving to net-centric operations
  - Requires net-centric logistics
- US re-assessing its global force posture to meet 21st Century requirements
  - Must be supported by global sustainment base
- US shifting weapon system sustainment to industry
  - Increasing reliance on industry supply chains
- Industrial globalization driving sub-assembly/component work offshore
  - Materials being provided by unstable sources (in some cases)

Strategic Logistics Transformation is directed towards ensuring assured support for US and Allied Forces.

Charting the Course



- **Strategic Context & Vis**

  - Developing Joint Capabilities

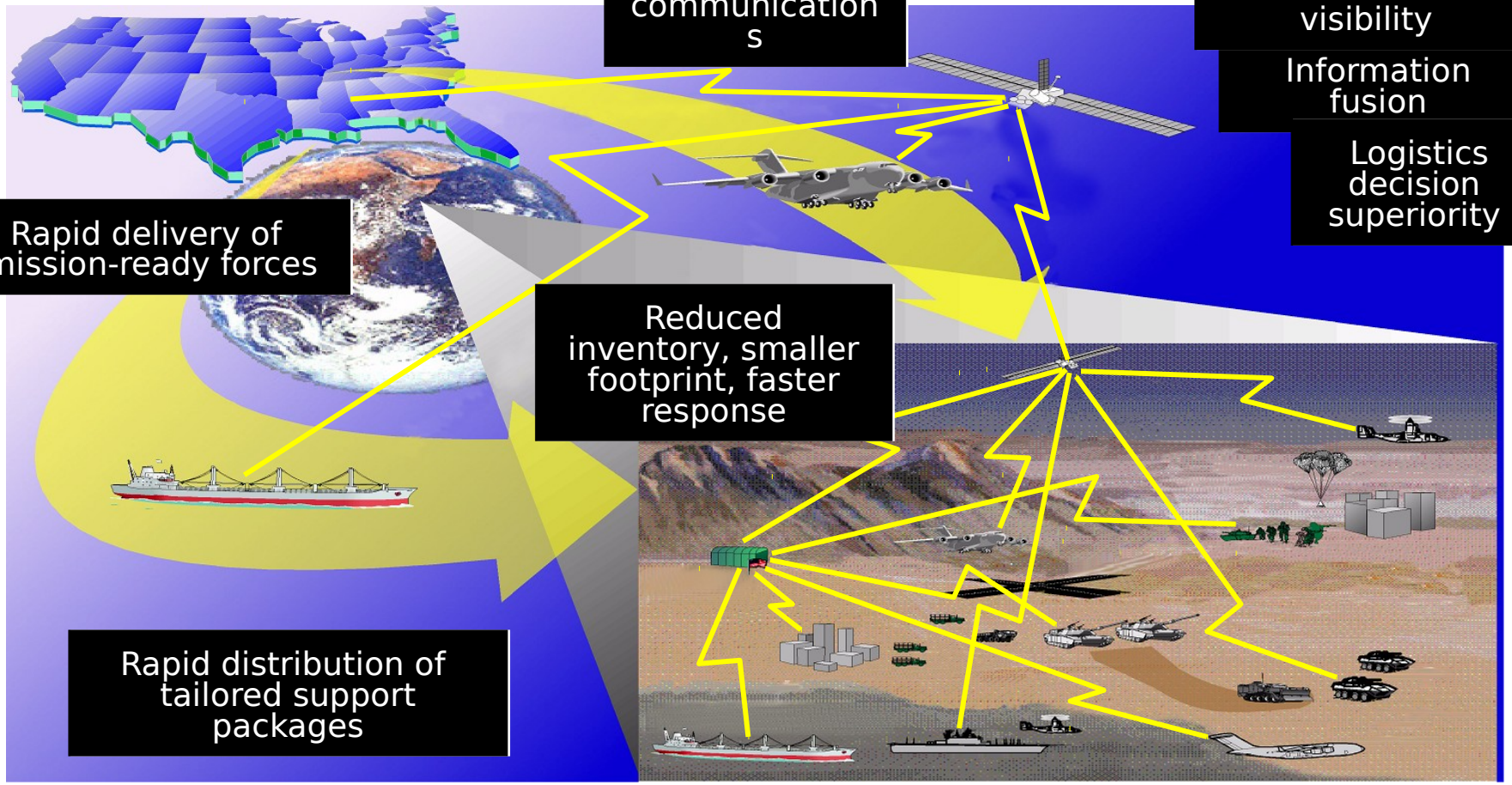
- **Focused Logistics**

  -Initiatives

(DPO, JTLM, Info Fusion (RFID/UID/TAV); TLCSM,

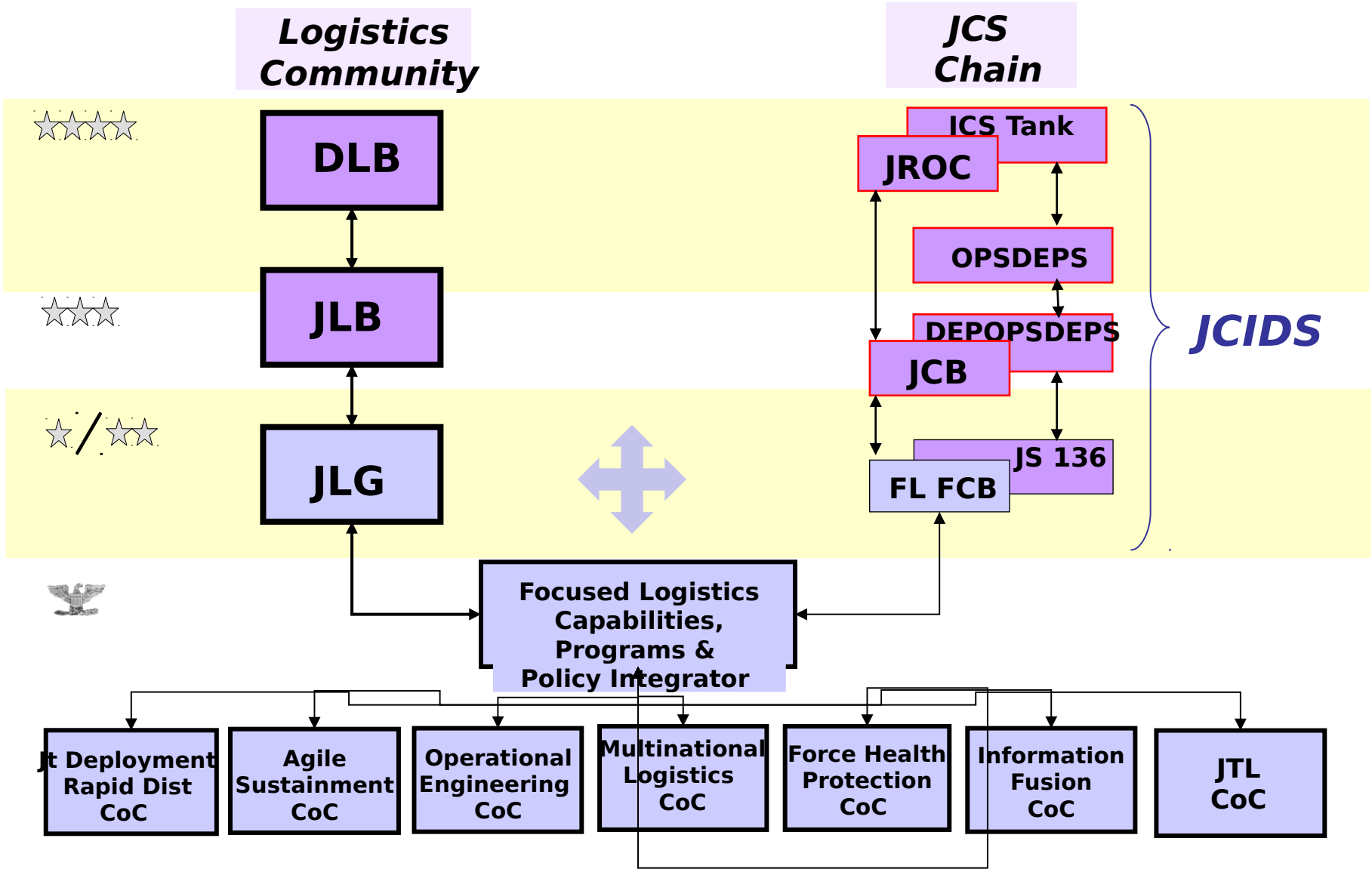
Focused Logistics

JROC Approved



Bottom line: ***Forces in theater — whether forward-stationed or deployed — deliver more capability, require less support***

FL Governance



Logistics Transformation Strategy

SPG Language

By 30 September 2004, the USD(AT&L) will reconcile:

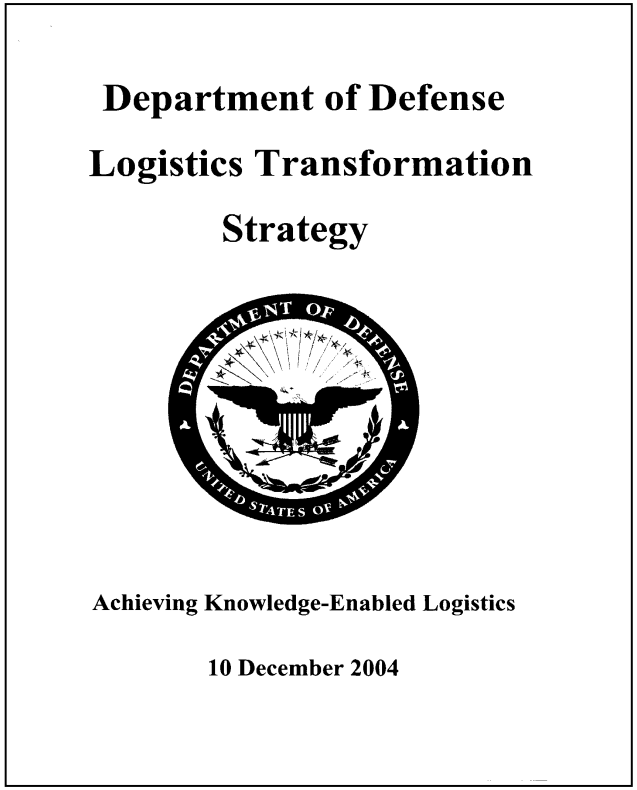
Sense & Respond Logistics concept (S&RL)
Force-Centric Logistics Enterprise (FLE)
Focused Logistics (FL)

…into a coherent **logistics transformation strategy** that supports distributed, adaptive operations.

USD(AT&L) Memo

- **Logistics Transformation Roadmap** will provide a coherent way forward, including milestones and resources, that encompasses:
  - Force-Centric Logistics Enterprise (FLE)
  - Ongoing Distribution Process Owner efforts
  - Sense and Respond Logistics
  - Joint Theater Logistics Management
- Product will be a Transformation Roadmap for integrating logistics from point-of-effect to source of supply/services, across Services and Defense Agencies.

Logistics Transformation Strategy



- Recognized Focused Logistics as JROC-Approved Concept
- Incorporated Sense and Respond Tenets
- Subsumed Force-Centric Logistics Enterprise initiative
- Recognizes emerging transformation concepts

Joint Logistics Board is actively implementing this Transformation Strategy.

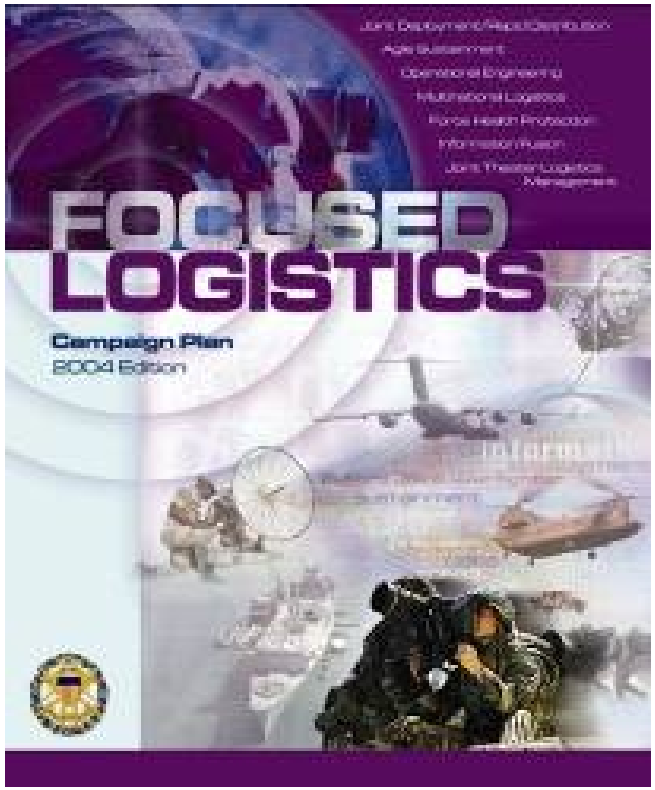
FL Strategic Issues at the JLB

- **Full integration of intelligence, operations, logistics, and a net-centric environment in the Global information Grid?**
- **Network hosted business rules for sourcing and lateral redistribution**
  - **Including allied material?**
- **Industrial base responsiveness to demand signals**
  - **With a "build-to-order" industry?**
- **DoD capability to process demand signals (that are not requisitions)?**
  - **Sensor suites and backfitting to fielded systems**
  - **Routing and response messaging**
- **Expanding Combatant Commanders directive authority?**
- **Broader global sourcing of material and services?**
- **Reduced theater logistics footprint, relying on reach back capability?**
- **DoD capability to document, translate, and manage commander's intent and situational awareness into appropriate logistics actions in an automated process?**
- **Dramatic increases in logistics process integration**
  - **Which requires increased systems integration?**

Joint Logistics Board will consider these issues thru Feb 06.

FL Roadmap (FLR)

- FLR serves as programmatic baseline for FL capabilities
- FLR complements FL Concept and FL Campaign Plan
- FLR defines and integrates the portfolio of FL enabling progr and initiatives for ongoing FL FCB analysis



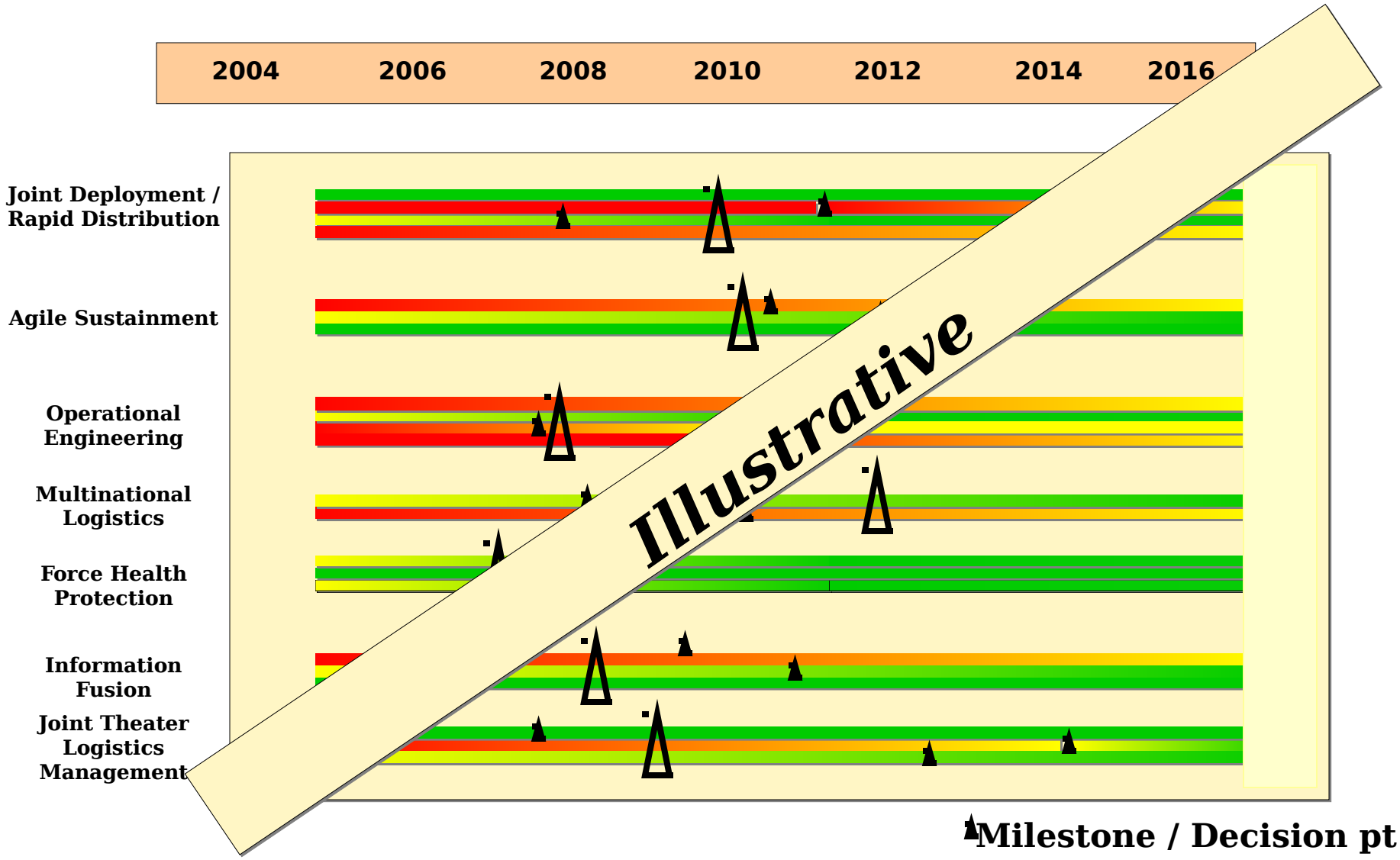
FL Roadmap Approach

- Provide a fact-based assembly of current FL enabling programs and initiatives
- Include descriptions, expected outcomes, resources, and milestones
- Define Program/Initiative relationships within FL Challenge Areas
- Develop and maintain a supporting data base for on-going portfolio management

Subsequent FLR revisions will incorporate results of FL FCB / J4 Challenge Area assessments

First high-level baseline of each FL Challenge Area

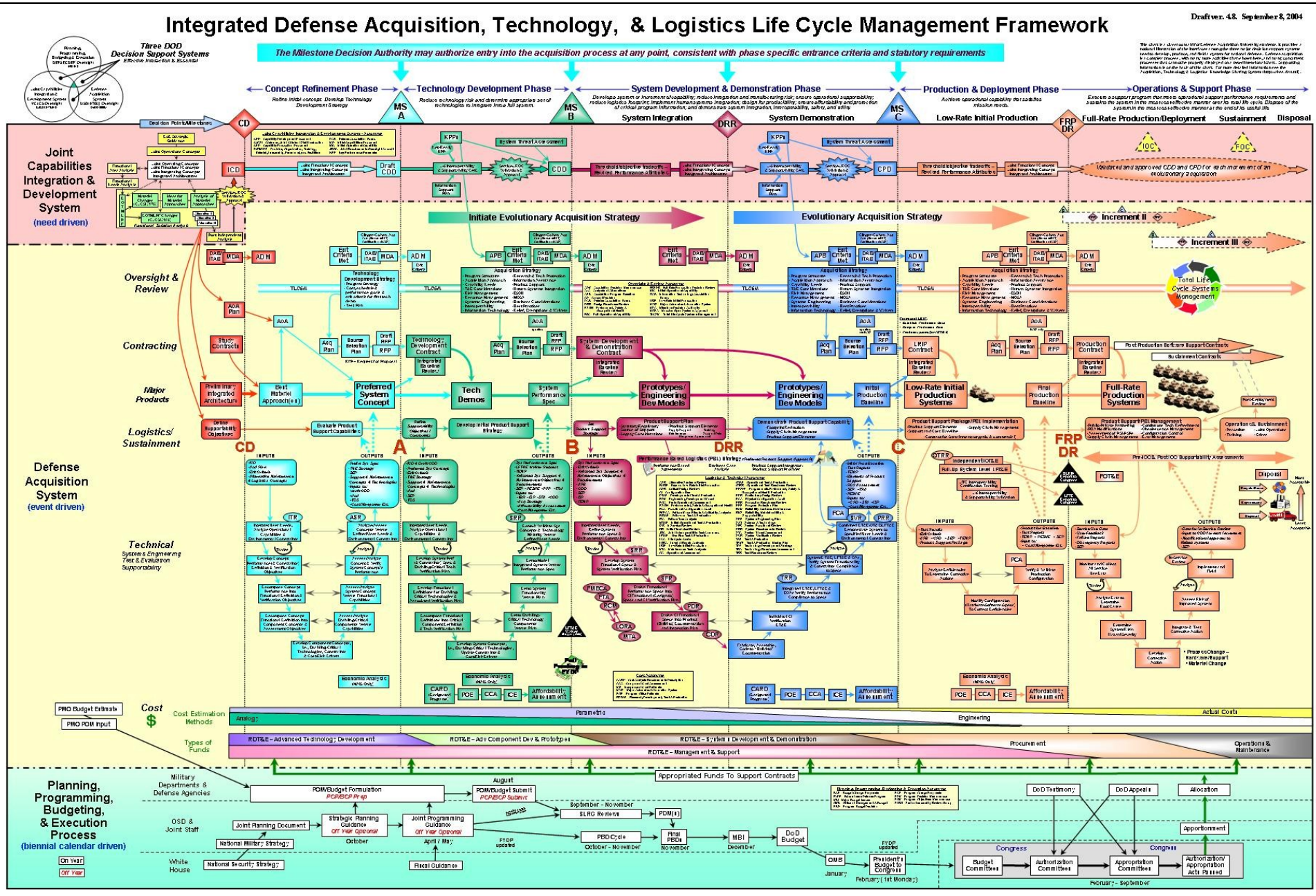
Focused Logistics Roadmap



Joint Logistics Board Priorities

Deployed Forces	• **Support current operations** • **Ensure success of the Distribution Process Owner (DPO)**
Commercial commodity flows	• **Streamline material flows** • **Explore and implement Customer Pay opportunities**
Weapons Systems	• **Accelerate Performance-Based Logistics (PBL)** • **Develop a way ahead for achieving maintenance excellence (e.g., Lean)**

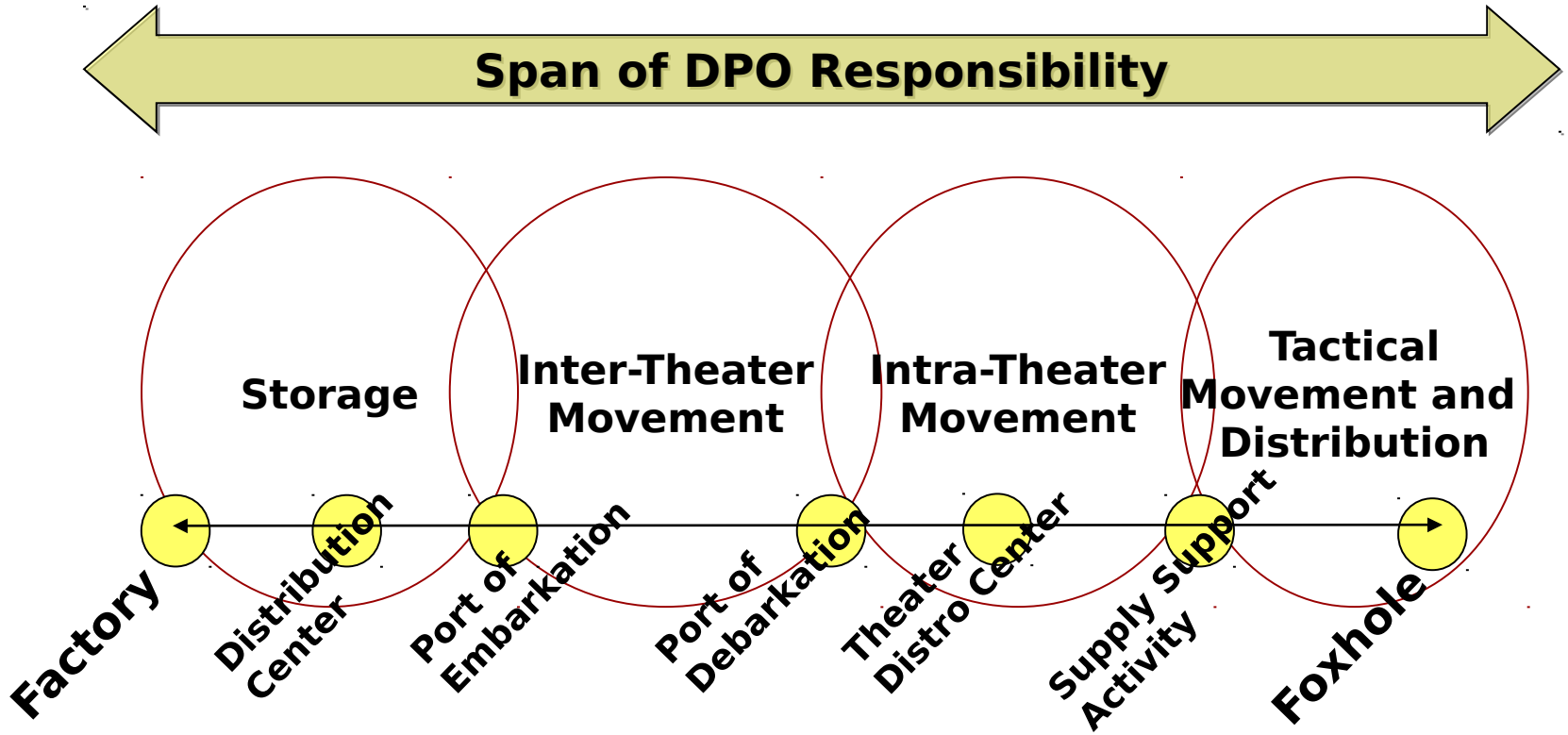
The New Wall Chart



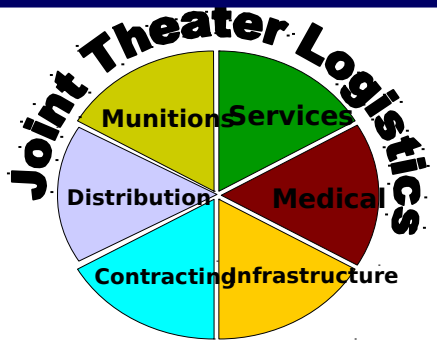
Distribution Transformation

- Distribution Process Owner
- Joint Theater Logistics
- Information Fusion
  - Radio Frequency Identification (RFID) & Unique Identification (UID) to enable
    Total Asset Visibility (TAV)

Distribution Process Owner



Joint Theater Logistics (JTL)

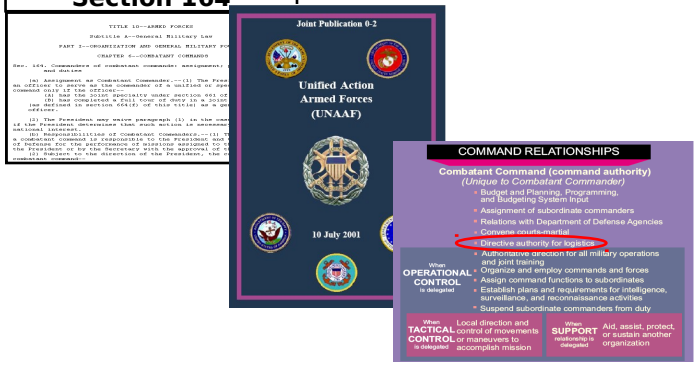


CoCom has Directive Authority for Logistics today

Armor Fusion

Tsunami Relief

Title 10 USC Section 164


Joint Publication 0-2
Unified Action Armed Forces (UNAAF)
10 July 2001
COMMAND RELATIONSHIPS
Combatant Command (command authority)
(Unique to Combatant Commander)
Budget and Planning, Programming, and Budgeting System Input
Assignment of subordinate commanders
Relations with Department of Defense Agencies
Convene courts-martial
Directive authority for logistics
Authoritative direction for all military operations and joint training
Organize and employ commands and forces
Assign command functions to subordinates
Establish plans and requirements for intelligence, surveillance, and reconnaissance activities
Suspend subordinate commanders from duty
When OPERATIONAL CONTROL is delegated
When TACTICAL CONTROL is delegated
Local direction and control of movements or maneuvers to accomplish mission
When SUPPORT relationship is delegated
Aid, assist, protect, or sustain another organization

- ✓ *See the flow*
- ✓ *Integrate, prioritize & synchronize*
- ✓ *Continuous collaboration among joint, interagency & multinational*

JTL is <u>capability</u> to exercise directive authority for

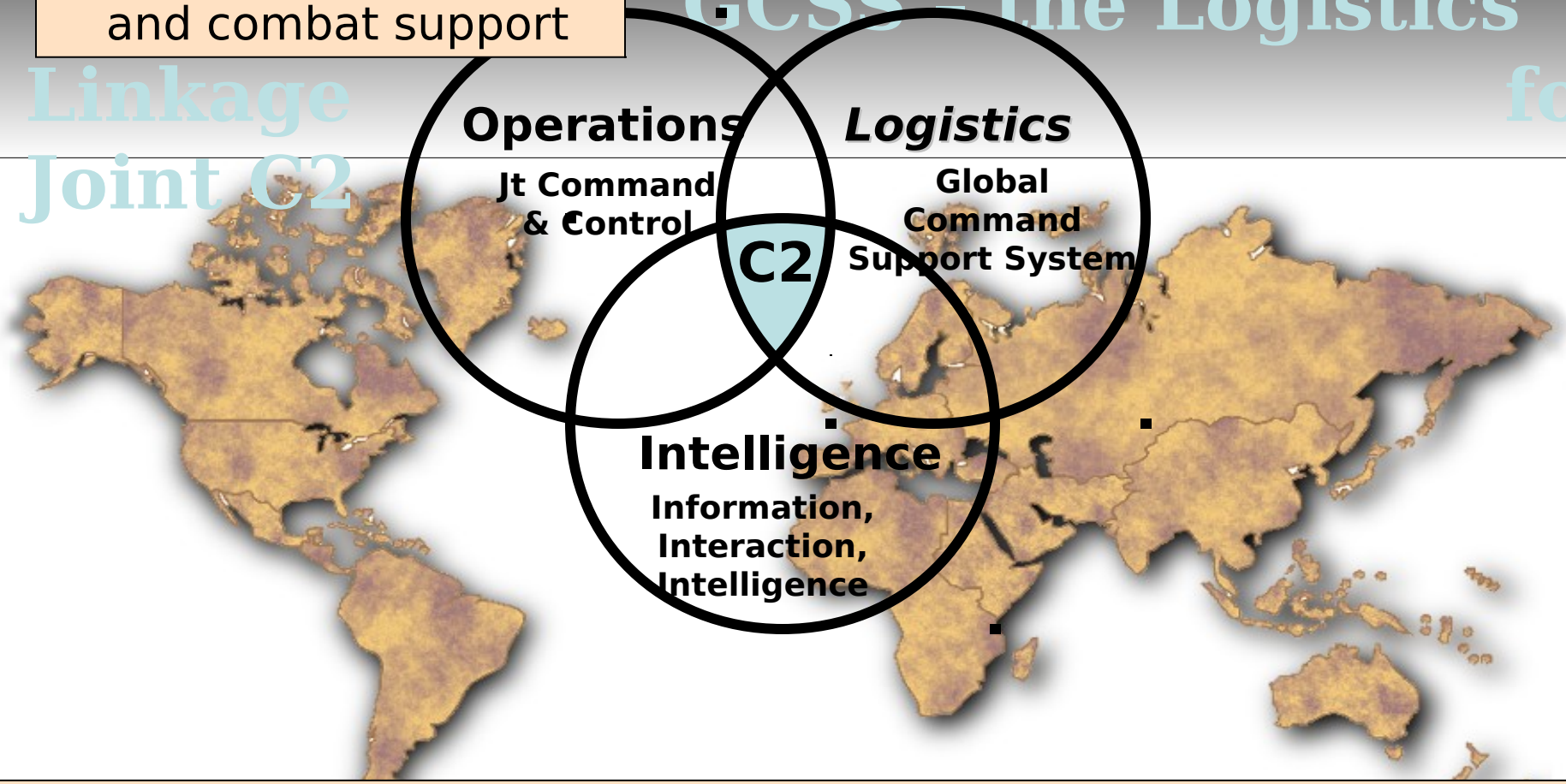
Global Support Network

- Coordination of industrial support initiatives with allied countries
  - International standards to enhance interoperability
  - Weapon system support guiding principles
- Realignment of sustainment goods and services to global supplier base
  - Pre-positioned material
  - US service providers
  - Allied service providers
- Capitalize on global presence of defense industry
  - Internal company technology transfer
  - Extend “co-production” providers into sustainment
- Increased emphasis on strategic sourcing
  - Facilitate material support from stable allies

These are required long-term actions that involve legislative and regulatory changes within the US and Allied countries.

Information Fusion

Closing the link between command and control and combat support



One fused picture for analysis, planning and execution

DoD RFID Policy

Active RFID

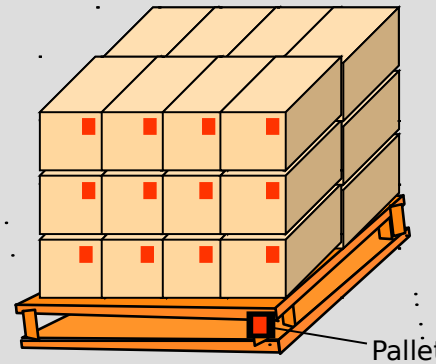
- All freight containers, consolidated air pallets and large engine containers shipped to/from overseas DoD receiving points

Passive RFID, beginning Jan. 2005

- Cases, pallets of materiel (repair parts, clothing/textiles, MREs) shipped to primary DoD receiving points
- EPC-compliant Tags
  - Currently available Class 0 and Class 1, V1 EPC tags
  - When available: Class 1, Generation 2 EPC tags
- Contractually required

A considered approach to global asset visibility.

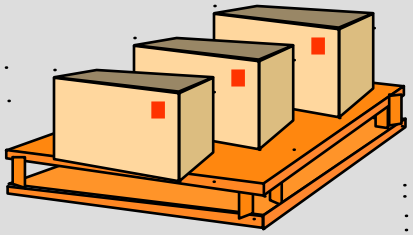
RFID Relationship to UID



Palletized Unit Load Tag

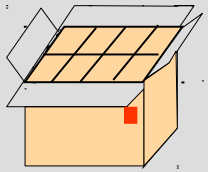
YES

Pallet tag



Shipping Container

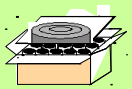
YES



Exterior Container

YES

Shipping/Transportation Environment



UID Item Unit Pack

NO

Operational Environment

UID—Integrated Situational Awareness of People, Places

Today -- No UIDs

No integrated planning view

Requirement: Capability to integrate force structure planning for identifying and constituting deployable combined force modules.

- Who is available?
- With what equipment?
- Where are they now?
- How long can we support them?

RFID Tracking

Questions

To Be State -- UIDs

Integrated planning view

People, things and property related to force structure.

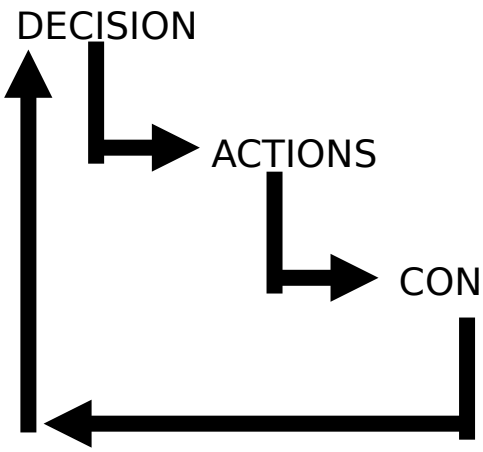
Deployment and constitution options can be continuously evaluated.

Required items identified, pre-positioned and tracked with RFID.

People and things can be identified to sites and facilities for rapid deployment response

Questions answered

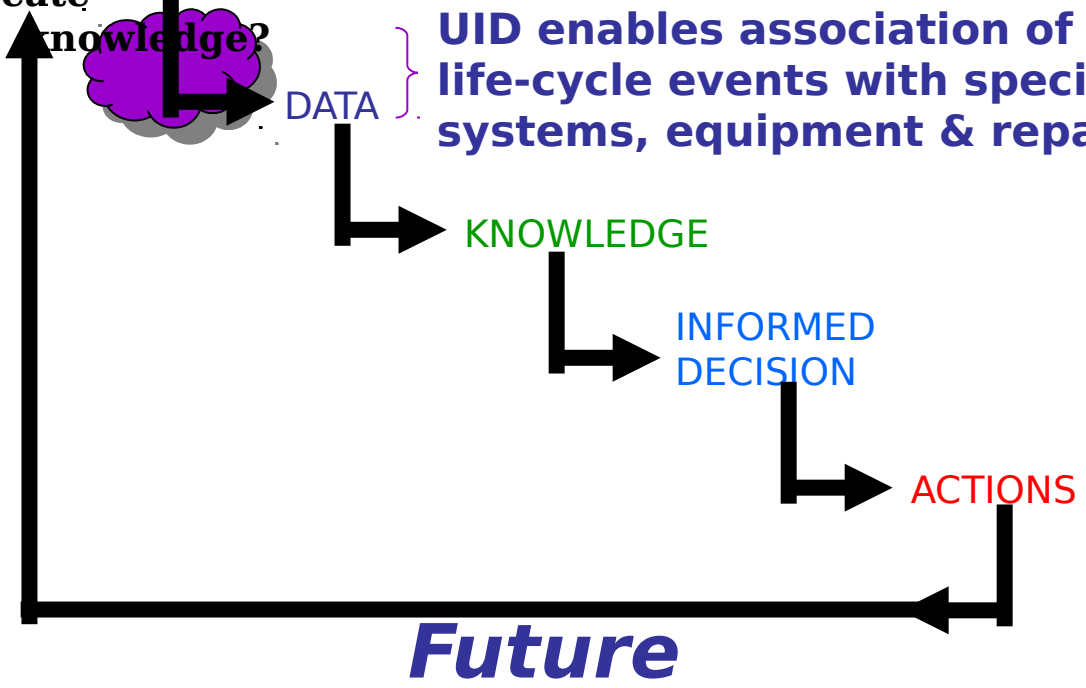
UID Objective: Informed Decision Making



Past

- **What actions need to take place?**
- **What decisions need to be made to initiate desired actions**
- **What does management need to know in order to make informed decisions?**
- **What data needs to be accessed and combined to create knowledge?**

UID enables association of specif life-cycle events with specific we systems, equipment & repair par

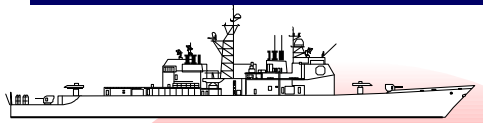


Future

Focused Logistics Vision

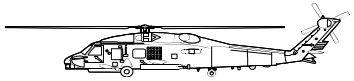
Enabled by

Better Knowledge and S&R Support



Embedded Sensors

Integrated Data Bus



Maintenance

Sense & Respond Logistic

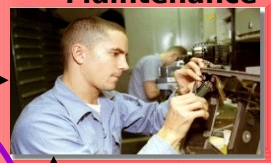
Anticipatory Materiel

Reduced Footprints

Integrated Logistics Information

On-Board Diagnostics and Prognostics

Maintenance



CBM+

Predictive Maintenance

Preventive Maintenance

RCM Data Analysis

Condition Monitoring

Reliability Analysis

Data Transfer

Interactive Training & Tech Support

IETMs

Pedigree Manage-ment

Troubleshooting and Repair

Portable Maintenance Aids

UID/SIM

Maintenance History Configuration Control

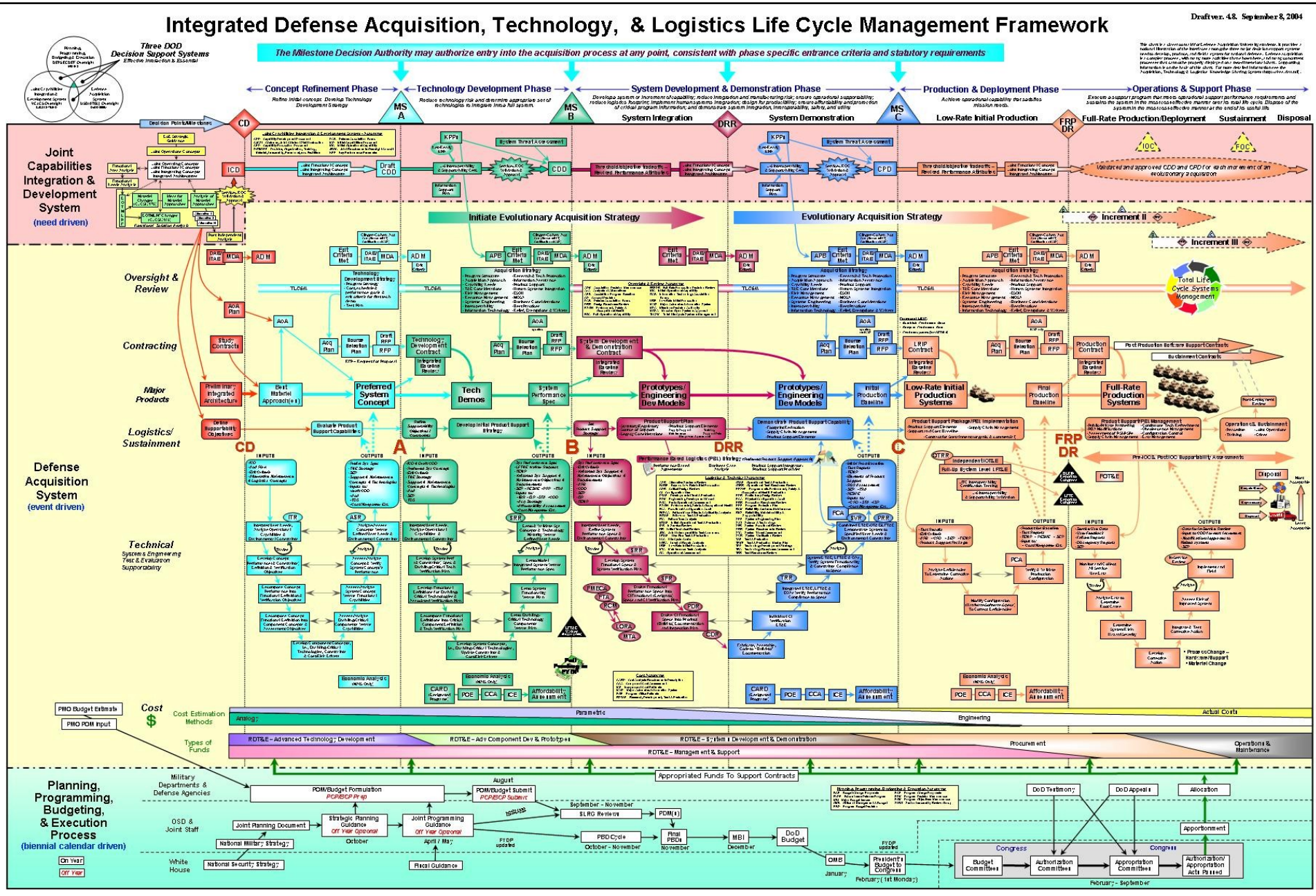
Battlespace Network

Linked to Warfighters

Total Asset Visibility (RFID)

- Real-time Status of Equipment Material Condition
- Integrated Supply/Maintenance via Serialized Item Manage
- Total Asset Visibility

The New Wall Chart

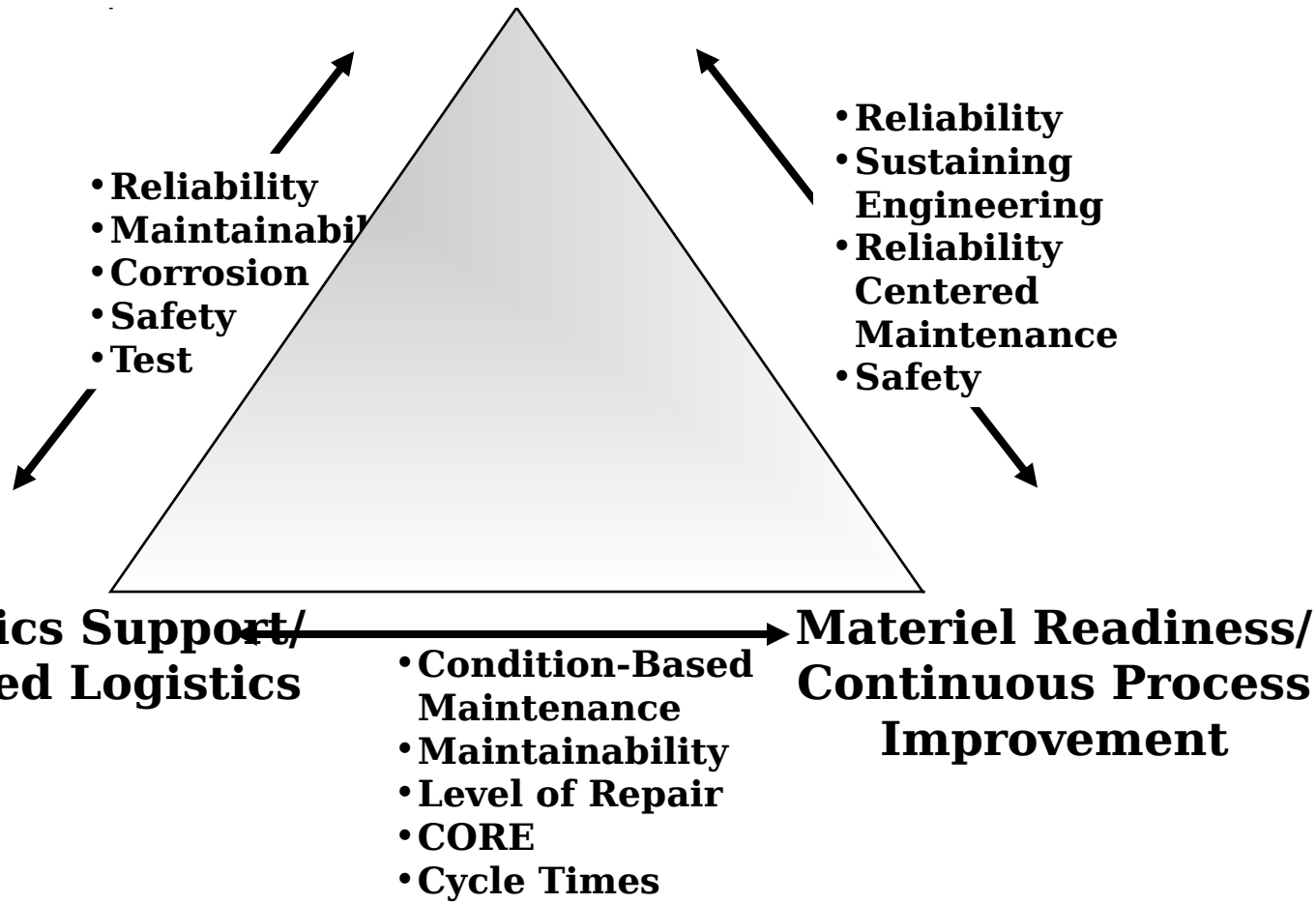


Current DoD Logistics Business

- 20-day customer wait time on priority parts
- Approximately $67B in inventory
- $90B per year in resource spend
  - 80% tied to Weapon System Support
- Employ over 1 million people

  (active duty, reserve & civilian)
- Business processes continue to be fractionated
  - Across Services
  - Across functions
- Fractioned processes supported by over 600 disparate information systems

The Life Cycle Iron Triangle



Managing Performance Across the Life Cycle

Weapon System Support Transformation

- Total Life Cycle Systems Management
- Performance-Based Logistics

A New STRUCTURE and STRATEGY for SUPPORT

STRUCTURE

Designate a Single Point of Accountability for the Weapon System from Cradle to Grave

Total Life Cycle Systems Management

TLCSM

STRATEGY

Buy Weapon System Support As an Integrated Package, vice Segmented Functions

Performance Based Logistics

PBL

DoD 5000 Policy

Total Systems Approach. The PM shall be the single point of accountability for accomplishment of program objectives for total life cycle systems management, *including sustainment*.

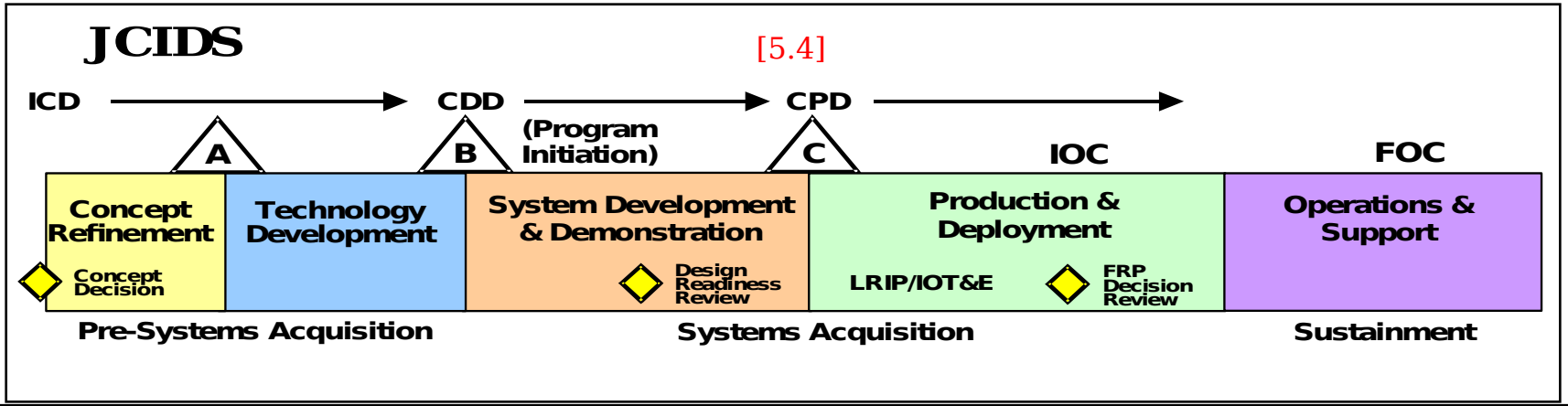
Performance-Based Logistics. PMs shall develop and implement performance-based logistics strategies that optimize total system availability while minimizing cost and logistics footprint. Sustainment strategies shall include the best use of public and private sector capabilities through government/industry

Total Life Cycle Systems Management [5.1.1]

Life Cycle Logistics (LCL) [5.1.2]

LCL in Systems Engineering (SE) [5.2]

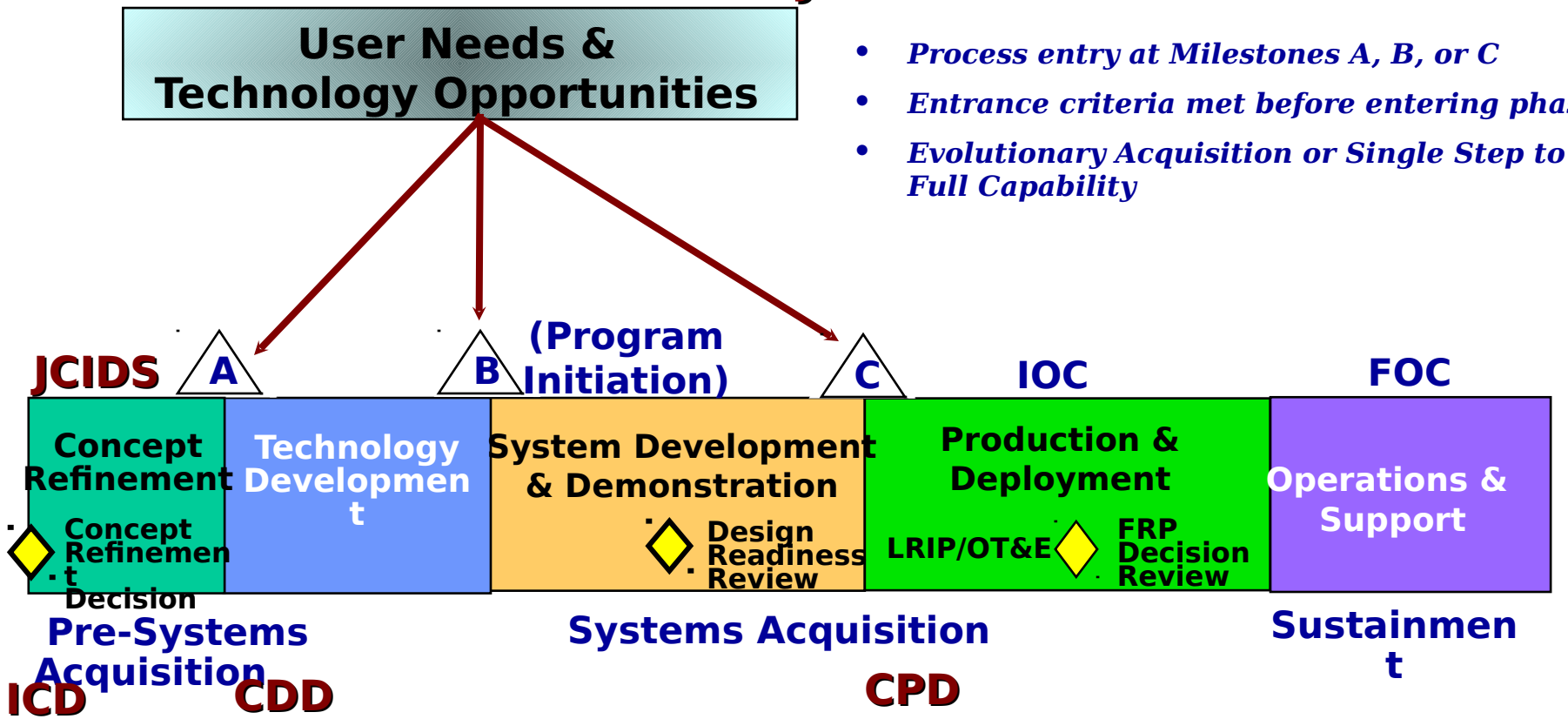
Performance Based Logistics (PBL) [5.3]



Under TLCSM the PM is responsible for Life Cycle Logistics (LCL), emphasizing LCL in systems engineering and implementing product support through Performance Based Logistics (PBL).

DoD 5000 Acquisition Model

Linked With JCIDS Process

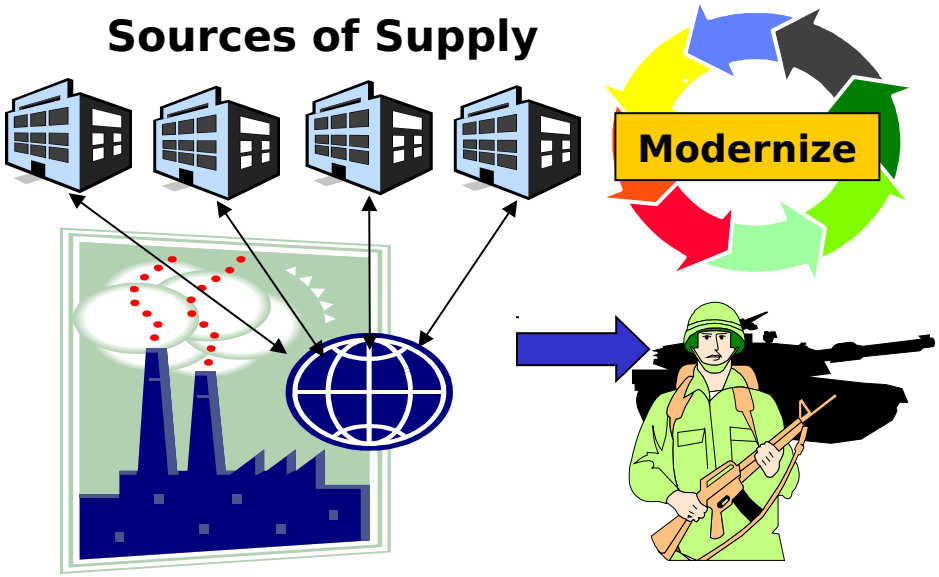


- *Process entry at Milestones A, B, or C*
- *Entrance criteria met before entering phase*
- *Evolutionary Acquisition or Single Step to Full Capability*

ICD: Initial Capabilities Document
CDD: Capabilities Development Document
CPD: Capabilities Production Document
IOC: Initial Operating Capability
FOC: Full Operating Capability
LRIP: Low-Rate Initial Production
OT&E: Operational Test and

Emphasis on Evolutionary Acquisition

Acquisition Framework from the Warfighter View



Sustaining the System

- Ready, Available Safe Assets
  - 24/7 Availability
- Reliability & Maintainability
- Affordable Weapon Systems
- Obsolescence/Tech Refresh
- Reduced Footprint
- Logistics Chain Reliability
- Logistics Chain Effectiveness
- Logistics Chain Cycle Time
- Retrograde Management

PBL Weapon System Support

Real-Time System Status

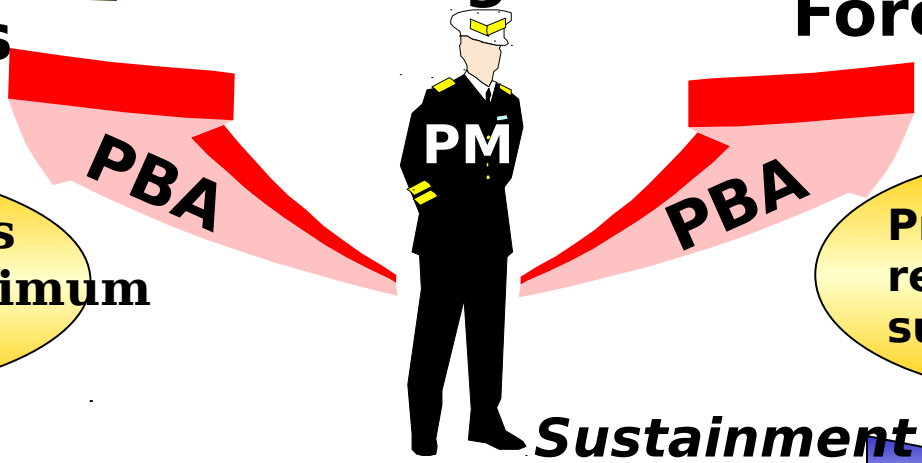
Industry/Government

Partnerships

Buys Performance As a Package
(Including Surge/Flexibility)

Weapon System Management

Force Provider



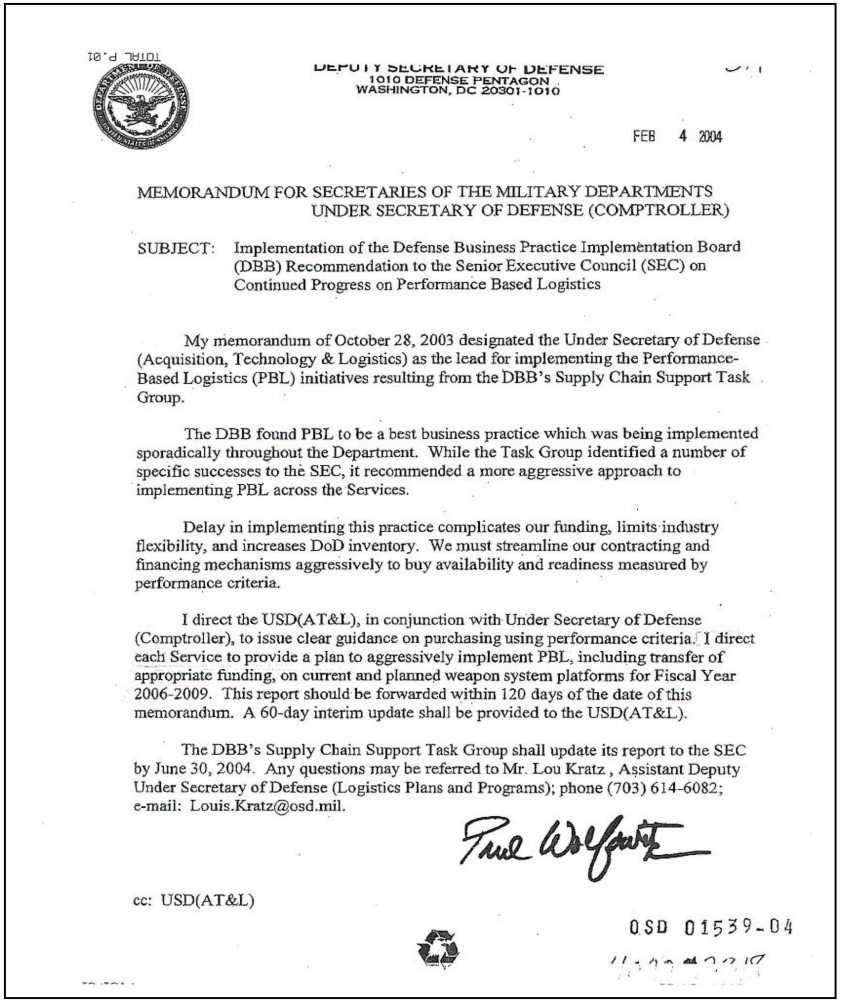
Ensure system is sustained at optimum level per PBA

Provide continuous, reliable, affordable support per PBA

Acquisition ***Sustainment*** ***Disposal***

Visibility into cost/risk decisions across life cycle

Deputy SecDef PBL Guidance



DEPUTY SECRETARY OF DEFENSE
1010 DEFENSE PENTAGON
WASHINGTON, DC 20301-1010

FEB 4 2004

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
UNDER SECRETARY OF DEFENSE (COMPTROLLER)

SUBJECT: Implementation of the Defense Business Practice Implementation Board (DBB) Recommendation to the Senior Executive Council (SEC) on Continued Progress on Performance Based Logistics

My memorandum of October 28, 2003 designated the Under Secretary of Defense (Acquisition, Technology & Logistics) as the lead for implementing the Performance-Based Logistics (PBL) initiatives resulting from the DBB's Supply Chain Support Task Group.

The DBB found PBL to be a best business practice which was being implemented sporadically throughout the Department. While the Task Group identified a number of specific successes to the SEC, it recommended a more aggressive approach to implementing PBL across the Services.

Delay in implementing this practice complicates our funding, limits industry flexibility, and increases DoD inventory. We must streamline our contracting and financing mechanisms aggressively to buy availability and readiness measured by performance criteria.

I direct the USD(AT&L), in conjunction with Under Secretary of Defense (Comptroller), to issue clear guidance on purchasing using performance criteria. I direct each Service to provide a plan to aggressively implement PBL, including transfer of appropriate funding, on current and planned weapon system platforms for Fiscal Year 2006-2009. This report should be forwarded within 120 days of the date of this memorandum. A 60-day interim update shall be provided to the USD(AT&L).

The DBB's Supply Chain Support Task Group shall update its report to the SEC by June 30, 2004. Any questions may be referred to Mr. Lou Kratz , Assistant Deputy Under Secretary of Defense (Logistics Plans and Programs); phone (703) 614-6082; e-mail: Louis.Kratz@osd.mil.

cc: USD(AT&L)

OSD 01539-04

- **PBLs established as a DoD best practice**
- **More aggressive approach for PBL implementation**
- **Direction to issue "clear guidance" on performance-based purchasing**
- **Each Service has 120 days to provide a plan for aggressive PBL implementation**

MID 917

MANAGEMENT INITIATIVE DECISION No. 917

SUBJECT: Performance Based Logistics (PBL)

DOD COMPONENTS: Military Departments and the Office of the Secretary of Defense

SUMMARY OF EVALUATION: This Management Initiative Decision (MID) directs a pilot program to test revised contracting, programming, budgeting, and financing processes for PBL agreements. The six programs that will participate in this pilot are: the Stryker, the Future Combat System, the EA-6B's ALQ-99 Tactical Radar Jamming System Pod, the Expeditionary Fighting Vehicle, the F-22, and the Joint Strike Fighter (JSF). Specifically, for each pilot program this MID directs the Military Departments and the JSF Joint Program Office (JPO) to:

- Complete a PBL business case analysis within 180 days of the approval of this MID. If the BCA concludes that PBL is the best sustainment process for that system:
  - Develop an acquisition strategy to execute a true performance agreement for sustainment.
  - Realign PBL program resources from functional program elements (PE) into the PE that finances the system the PBL program supports.
  - Identify single lines of accounting in applicable Operation and Maintenance (O&M) appropriations for financing O&M requirements for the pilot PBL programs. Consolidate/realign O&M PBL program resources into these single lines within each applicable O&M appropriation.
- Brief an interim report on implementation of this MID not later than 90 days after the approval of this MID.

This MID also directs the Total Life Cycle Systems Management (TLCSM) Steering Group to develop criteria and milestones for evaluating the pilot programs' plans for and experience with the revised processes and criteria for expansion of the revised processes beyond the pilot programs to legacy and/or other new systems.

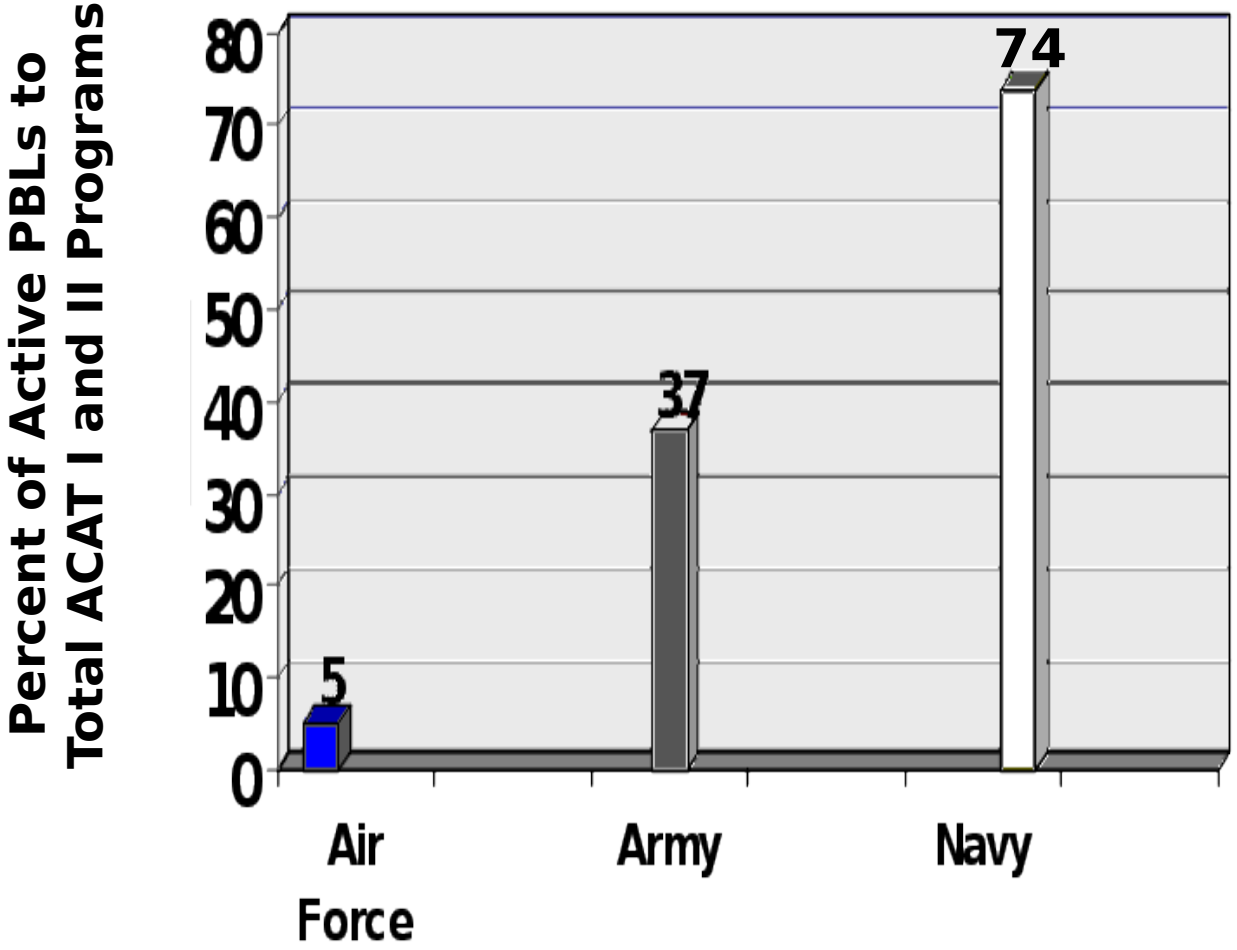
Establishes 6 Pilot Programs to test consistent PBL strategy:

- Contracting
- Programming
- Budgeting
- Financing processes

Emphasizes:

- Functional Program Elements
- Single Line Accounting

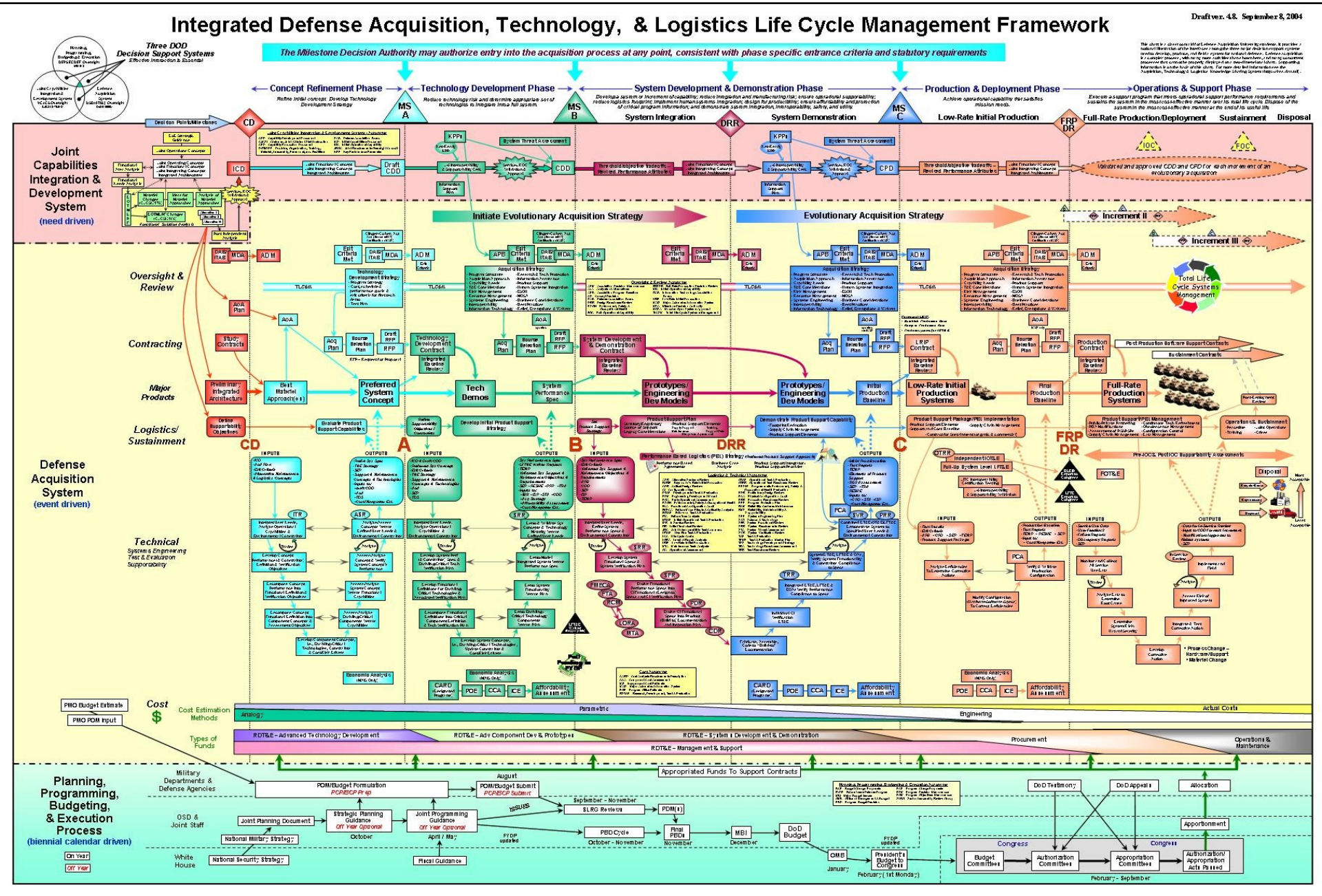
PBL Implementation



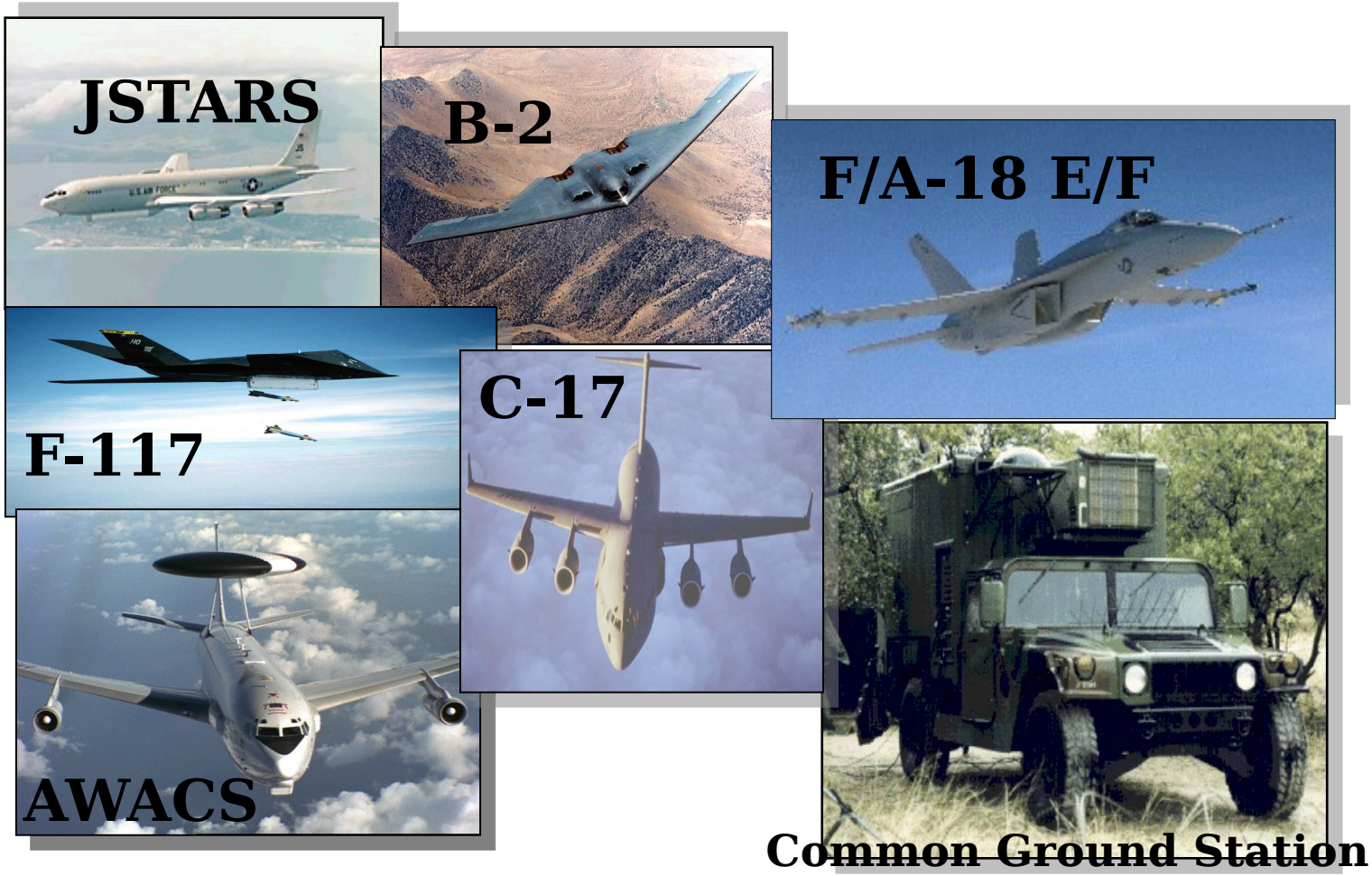
PBL Accomplishments

- ✓ **Significantly restructured JROC instruction to emphasize**
  - –Sustainability
  - –Maintainability
  - –Mobility
- ✓ **Significantly restructured 5000 Series**
  - –TLCSM
  - –PBL is preferred sustainment strategy
  - –Issued supporting Sustainment Framework
- ✓ **Converted or started 120 PBL programs (through FY04)**
  - –Documented $15B in savings over FY 05 FYDP
- ✓ **Reengineered DAU curriculum**
  - –Life Cycle Logistics
  - –Program Management
  - –Engineering
- ✓ **Engaged in program assistance/oversight**
  - –60 MDAPS
  - –TLCSM Executive Council
  - –AIA Tiger Team
- ✓ **Published enabling guidance**

The New Wall Chart



Demonstrated in OEF/OIF



Delivering Capability NOW!

Logistics Lessons Learned (Iraq)

- **Lack of tactical connectivity was a major inhibitor to capturing demands and processing requisitions**
- **Active RFID functioned well at strategic level**
  - **Significant problems with material visibility at the tactical level**
- **Continuing disconnect between strategic and tactical distribution**
- **Engineering/port opening capabilities came late**
- **Retrograde process absolutely broke**
- **Weapon Systems used at 4X normal r**

Reliability Issues ?

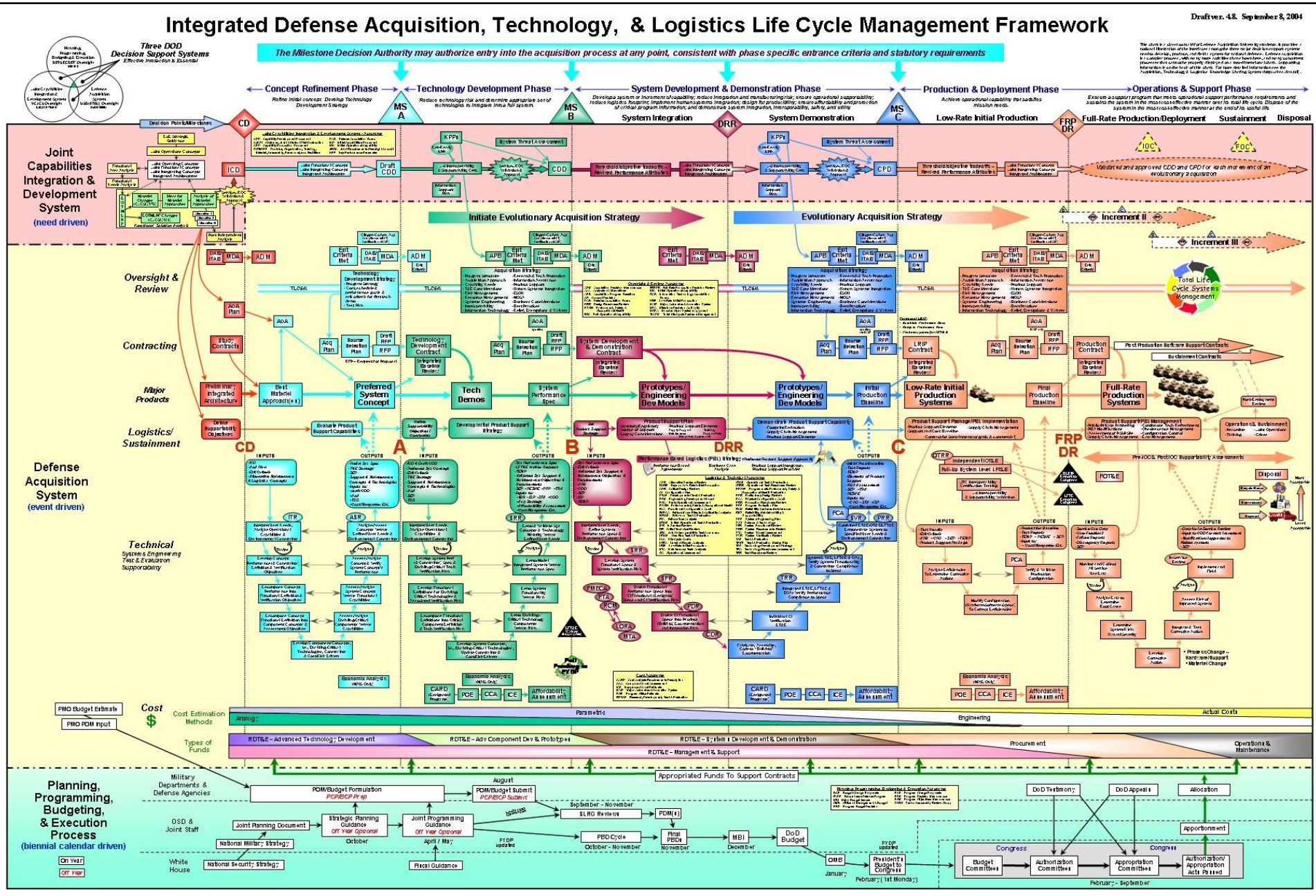
Elements were in U.S. vision, but not the plan!
We redirected resources to address

Microelectronics ?

- Ongoing US study of Microelectronics industry
  - #1 US problem with diminishing manufacturing sources
- 30-50% of US DoD material provided from offshore allied countries
  - Market driven by consumer electronics
- Emerging temperature, vibration, radiation range problems
  - These challenges shared by allied governments and other high-end users

Can we address these challenges with Allies?

The New Wall Chart



Summary

- ***Government and Industry must work together***

- **Framework has been established**
  - **Program Managers are Total Life Cycle Systems Managers**
  - **PBL is the preferred sustainment strategy**
- **Performance based products**
- ***CBM, UID, and RFID are important enablers***
- **Challenge to implement, must be cost effective**
- **Change is hard, but we owe it to the Warfighters to succeed**

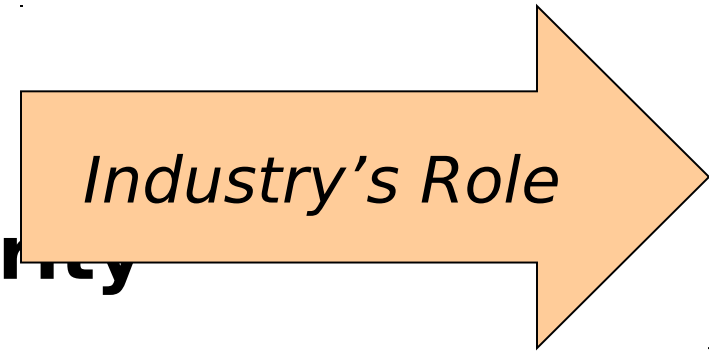
Meeting Warfighter needs Around the Clock, Around the Globe.

w/ New Logistics Capabilities

Wrap up … Where is DoD (wf) Going?

Building logistics capabilities that are:

- **Fully Integrated**
- **Expeditionary**
- **Net centric**
- **Decentralized**
- **Adaptable**
- **with Decision Superiority**
- **(Lethal)**



… and …Industry's Role ?

- Compress the Supply Chai
- Reduce Cycle Time
- Adopt Industry Best Prac
- Embrace Performance Based Logistics
- Leverage Public-Private

Not business as usual … be open to new ideas & take some risks

Attributes for Logistics Success -- Effective, Reliable, Affordable

...and finally ... the real (OSD) Closing Thoughts

- Logistics transformation highly dependent upon financial transformation
  - Focus on warfighter
  - Eliminate/reduce internal transactions
  - Remove "financial" incentives that sub-optimize end-to-end processes
- Enabling information systems infrastructure remains a significant challenge
  - Impeding rather than enhancing business transformation
  - Business transformation ongoing
  - "Systems architectures" do not reflect transformed business
- Numerous initiatives ongoing tied to "improving" the status quo
  - Is it time to "burn the bridges?" ...END

The New Wall Chart